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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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 Washington, D.C. 20231

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PATENT APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of:

INVENTOR(S): ODDSEN

TITLE: CONFIGURABLE MOUNT

Enclosed are the following papers required for a filing date under 35 CFR §1.53(b):

- ☒ Specification 19 pages
☒ Claims 27 pages
☒ Abstract 1 pages
☒ Drawings 19 sheets ☐ formal ☒ informal

The following additional papers are enclosed:

- ☐ Fee Transmittal
☒ Declaration and Power of Attorney
☒ Verified Statement(s) of Small Entity Status ☐ Independent Inventor ☒ Small Business
☐ Non-Profit ☐ Other
☐ Information Disclosure Statement ☐ Form PTO-1449
☐ Assignment and Cover Sheet
☐ Other:

Dated: 9/27/99

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PATENT

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APPLN NUMBER UNKNOWN	FILING DATE UNKNOWN	FIRST NAMED INVENTOR ODDSEN	ATTY. DKT. NO. 3757.3002
TITLE CONFIGURABLE MOUNT			ART UNIT UNKNOWN
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CERTIFICATE OF MAILING (37 CFR 1.10)

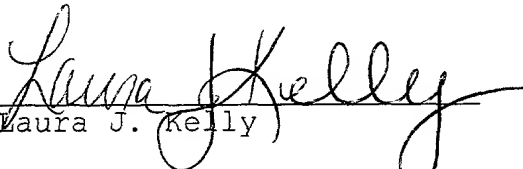
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I hereby certify that the following *attached* paper or fee:

Patent Application; including Specification (19pp.), Claims (27pp.), Drawings (19pp.), and Abstract (1p.).

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Assistant Commissioner for Patents, Washington, D.C. 20231.


Laura J. Kelly

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLN / PATENT NO. UNKNOWN	FILING / ISSUE DATE UNKNOWN	APPLICANT / PATENTEE ODDSEN
TITLE CONFIGURABLE MOUNT		ATTY. DKT. NO. 3757.3002

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9 and 1.27)--SMALL BUSINESS CONCERN**

I hereby declare that I am

- ☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN: INNOVATIVE OFFICE PRODUCTS, INC.
 ADDRESS OF SMALL BUSINESS CONCERN: 2100 LIBERTY STREET, EASTON, PA 18042

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third-party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☒ the specification filed herewith.
☐ application serial no. , filed
☐ patent no. , issued

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME: ODD N. ODDSEN, JR. TITLE: VICE PRESIDENT
 ADDRESS: 2100 LIBERTY STREET, EASTON, PA 18042

SIGNATURE:

DATE:

Sept 24 1999

CONFIGURABLE MOUNT

This application claims the benefit of U.S. Provisional Application 60/106,729 filed November 2, 1998 and U.S. Provisional Application 60/108,469 filed November 14, 1998.

Field Of The Invention

The present invention relates to apparatuses and systems for mounting an adjustable arm for a peripheral device such as a computer display screen, a keyboard, a telephone or the like.

Summary Of The Invention

Apparatuses and configurable mounting systems for mounting an arm device are disclosed. The arm device may be attached to a peripheral device, which may be an electronic device such as a computer display screen, a keyboard, a telephone or the like.

The systems comprise a set of components which may be configured to create apparatuses including a clamp mount, a wall mount, a "reverse" wall mount, or table or "flat" mount. In addition, the systems may comprise components which may be configured to create a panel mount and a slat wall mount. The mounting systems have many benefits and advantages to the consumer, distributor and manufacturer. The consumer obtains more than one different mounting option for the price of a single mount. Previously, the consumer was required to choose the type

of mount which she desired at the time of purchase of the arm. The systems also provide flexibility of providing a different mounting configuration in the future, if the consumer decides to move the arm or reconfigure the mount. A distributor of the mounting systems benefits by being relieved from maintaining an inventory of each of the different types of mounts. Also, the mounting systems may be efficiently packaged since the component elements are preferably no wider than the width of a typical arm apparatus. There are several advantages to the manufacturer including a decrease in inventory costs similar to that of the distributor, a lowering of the "piece" price of the mount since components of the systems may be used in a number of configurations and distinct castings are not required for each type of mount, and a decrease in labor costs since the consumer completes final assembly in the configuration she desires.

The components of the mounting systems include a shaft holder for receiving the shaft of the arm device, a long "L" member, and short "L" member, a clamping plate, and clamping screw. In a preferred embodiment, these components are used in conjunction with standard hardware including a long bolt with a hex head, a short screw, a pair of screws having flat tapered countersunk heads, a pair of wall screws, and a single nut. With these components and hardware, at least four of the above-noted mounting configurations may be achieved by the mounting systems of the present invention.

In another aspect, the configurable mount invention additionally comprises adapter brackets that are used to secure the mount to conventional office panel systems and both single and dual slot wall systems.

Brief Description Of The Drawings

The accompanying drawings, which are incorporated in and form a part of the specification, illustrate the embodiments of the present invention and, together with the description serve to explain the principles of the invention.

In the drawings:

FIG.1 is a perspective view of an apparatus according to the present invention in a reverse wall mount configuration and the orientation of the arm device to the mount;

FIG. 2 is a perspective view of an apparatus according to the present invention in a clamp configuration mounted to a table top;

FIG. 3 is an exploded perspective view of a clamp configuration of the present invention;

FIG. 4 is a perspective view of an apparatus according to the present invention in a wall mount configuration mounted to a wall;

FIG. 5 is an exploded perspective view of a wall mount configuration of the present invention;

FIG. 6 is a perspective view of an apparatus according to the present invention in a reverse wall mount configuration mounted to a wall;

FIG. 7 is an exploded perspective view of a reverse wall mount configuration of the present invention;

FIG. 8 is a perspective view of an apparatus according to the present invention in a table mount configuration mounted to a table top;

FIG. 9 is an exploded view of a table mount configuration of the present invention;

FIG. 10A is a top elevation view of a shaft holder according to the present invention;

FIG. 10B is a cross-section side elevation view of the shaft holder shown in FIG. 10A along line 10B-10B;

FIG. 11A is a top elevation view of a clamping plate according to the present invention;

FIG. 11B is a side elevation view of the clamping plate shown in FIG 11A;

FIG. 12A is a front elevation view of a long "L" member according to the present invention;

FIG. 12B is a side elevation of the long "L" member shown in FIG. 12A;

FIG. 12C is a top elevation view of the long "L" member shown in FIG. 12A;

FIG. 13A is a front elevation view of a short "L" member according to the present invention;

FIG. 13B is a side elevation of the short "L" member shown in FIG. 13A;

FIG. 13C is a top elevation view of the short "L" member shown in FIG. 13A;

FIG. 14 is an exploded view of a mount configuration of the present invention with an adapter bracket to secure the mount to a office panel wall system;

FIG. 15 is a perspective view of the panel wall mount configuration;

FIG. 16 is an exploded view of a mount configuration of the present invention with an adapter bracket arrangement to secure the mount to a slatwall having an upwardly facing slat;

FIG. 17 is an exploded view of a mount configuration of the present invention with an adapter bracket arrangement to secure the mount to a slatwall having upwardly and downwardly facing slats;

FIG. 18 is an exploded perspective view of a narrow clamp configuration of the present invention;

FIG. 19 is a side elevation view of the narrow short "L" member and the narrow clamping plate of the present invention.

Detailed Description Of The Preferred Embodiment

In describing a preferred embodiment of the invention illustrated in the drawings, in which like numerals represent like parts, specific terminology will be used for the sake of clarity. However, the invention is not intended to be limited to the specific terms so selected, and it is to be understood that each specific term includes all technical equivalents which operate in a similar manner to accomplish a similar purpose.

With reference to the drawings, in general, and FIGS. 1 through 17 in particular, the apparatuses and systems of the present invention are disclosed.

Reference is made to FIG. 1, 3, 5, 7, 9, 10A and 10B which illustrate mounting apparatuses 84, 82, 80, 86 for mounting a device 10 having an arm 18 on a surface 2, 4. Each apparatus includes a shaft holder 20 that has plurality of walls 22. It is anticipated that the plurality of walls 22 can merge to embody a shaft holder 20 that is circular. The walls 22 define a receptacle 24 having an enclosed bottom 26 and an opened top portion. The receptacle 24 is shaped to receive an arm device 10 having a cylindrical shaft 14. The shaft 14 of the arm device 10 may be removably inserted in receptacle 24 through the opened top portion as indicated by arrow 6, in which it may freely rotate.

In one embodiment(not shown), a washer may be placed in the bottom 26 of the receptacle 24 to create a more secure fit between the shaft 14 and the receptacle 24. Preferably, the washer is made of plastic. In yet another embodiment (not

shown), a bushing can be included on the interior sides of the walls 22 of the receptacle 24 to create less friction and a more secure fit between the shaft 14 and the receptacle 24.

The mounting apparatuses of the current invention each include an attachment means to attach the shaft holder 20 to a surface. A wide variety of attachment means may be employed to attach the shaft holder 20 to a surface. The preferred attachment means, along with alternative attachment means, are subsequently described.

In preferred embodiments, the apparatuses further comprise a cylindrical threaded rod and a nut 60. The bottom 26 further comprises a hole 28 for receiving the rod. The shaft holder 20 is attached to a long "L" member 30 or to a surface 2,4 by passing the cylindrical threaded rod through the bottom 26 hole 28 and through the long "L" member 30 or the surface 2,4, and securing the nut 60 to the rod. When the shaft holder 20 is attached to a long "L" member 30, the long "L" member 30 in turn is attached to a surface 2,4.

FIG. 1, 6, 7, 10A, 10B, and 12A through 12C show the mounting system of the present invention configured as a reverse wall mount apparatus 84 having a long "L" member 30. The long "L" member 30 has a first flange 32 and a second flange 36 that are generally perpendicularly attached to one another. First flange 32 has an "a" side 33 and a "b" side 34. The "a" side 33

is the side of first flange 32 that is facing second flange 36. The "b" side 34 is opposite the "a" side 33 of first flange 32.

Long "L" member 30 is secured by at least one wall screw 54 threaded through at least one threaded hole 38 in second flange 36, and into wall 4. Preferably, second flange 36 contains two threaded holes 38, arranged vertically to each other, and the long "L" member is secured by two wall screws 54. In a preferred embodiment, the wall screws 54 are made of wood, and they are secured to a stud in wall 4. Alternatively, any type of threaded cylindrical rod may be used in place of the at least one wall screw 54, provided the rod is of sufficient strength to hold the apparatus 84 to the wall 4.

In this embodiment, the shaft holder 20 is secured to the "b" side 34 of first flange 32 of long "L" member 30 by screw 56, having a flat tapered countersunk head, and nut 60. Preferably, screw 56 is 3/8-16 x 1 inch long. Screw 56 passes through hole 35 of first flange 32 and hole 28 of bottom 26 of shaft holder 20. The head of screw 56 may be received by a recess in the hole 35 on the "a" side of first flange 32. Preferably, bottom 26 has a recess 29 adapted to receive the nut 60.

With reference to FIGS. 2, 3, 10A through 13C, the mounting system configured as a clamp mount apparatus 82 is shown. Shaft holder 20 is secured to "b" side 34 of first flange 32 of long "L" member 30 by screw 56 and nut 60. In a preferred embodiment, screw 56 has a flat tapered countersunk head and dimensions of

3/8-16 x 1 inch long. Hole 35 on the "a" side 33 of first flange 32 has a recess to receive the tapered head of screw 56. The tapered head of screw 56 is adapted to be secured in a countersunk manner in hole 35 such that a flat surface is obtained on "a" side 33 of first flange 32. Screw 56 extends through hole 28 through the bottom 26 of shaft holder 20. A hex nut 60 is secured to screw 56.

Preferably, bottom 26 of shaft holder 20 has a recess 29 adapted to receive the nut 60 which facilitates in the securing of nut 60. Second flange 36 of long "L" member 30 has at least one threaded hole 38. In a preferred embodiment, second flange 36 has two threaded holes 38.

Short "L" member 40 having first flange 42 and second flange 44 in a general perpendicular orientation to each other is attached to the second hole 38 which is the farthest from first flange 32 of long "L" member 30 by screw 58. First flange 42 has a threaded hole 43, and second flange 44 has a recessed hole 45. Preferably, screw 58 has a flat tapered countersunk head and dimensions of 3/8-16 x 1/2 inch long. Screw 58 extends through hole 45 of flange 44 into the lower threaded hole in second flange 36 such that the head of screw 58 is countersunk relative to face 46.

It is to be understood however, that any type of threaded cylindrical rod may be used in place of screw 58, provided the

rod is of sufficient strength to hold the short "L" member 40 to the long "L" member 30.

First flange 42 of short "L" member 40 has a threaded hole 43 for receiving clamping screw 52 which is screwed through hole 43 and meets hole 51 of clamping plate 50. Preferably, clamping screw 52 is 1/2-13 x 3 inches long, and the end of clamping screw 52 is adapted to receive a hex head wrench which is used to tighten the clamp.

Hole 43 is generally centered below hole 35 of first flange 32 of long "L" member 30. The mount is secured to a projecting work surface such as a table top by clamping the surface 2 between "a" side 33 of first flange 32 of long "L" member 30 and the top surface of clamping plate 50. In a preferred embodiment, the clamping plate 50 is made of steel, is circular, and has a 2 inch diameter. A hole 51 is located in the center of clamping plate 50.

In other embodiments (not shown), at least one buffering pad may be placed between "a" side of first flange 32 and the surface 2. In addition, the at least one buffering pad may be alternatively or additionally placed between the top of clamping plate 50 and the surface 2. The buffering pad is shaped similarly to clamping plate 50, having a 2 inch diameter and including a center hole. The buffering pad can protect the surface from abrasion from the apparatus 82. In addition, the buffering pad can create a more secure contact between the

apparatus 82 and the surface. While any non-abrasive material could be used to make the buffering pad, a preferred material is neoprene foam. Additionally, the buffering pad may contain an adhesive for adhering to the pad to the "a" side of first flange 32 or to the clamping plate 50.

FIGS. 18 and 19 show the mounting system of the present invention configured as a narrow clamp mount apparatus 90. The narrow clamp mount 90 is similar to the clamp mount 82. Narrow clamp mount 90 utilizes the long "L" member 30 and shaft holder 20 utilized in clamp mount 82. In addition, narrow clamp mount 90 attaches the long "L" member 30 to the shaft holder 20 in the same manner in which they are attached for the clamp mount 82.

The narrow clamp mount 90, however, is adapted to be clamped onto a narrow projecting surface 302, on which the top surface of the projection is deeper than the bottom surface of the projection. A desk having legs or sides is an example of a narrow projecting surface. The narrow clamp mount 90 can be used on a narrow projecting surface 302 that is narrower than the width of the first flange 42 of the short "L" member 40 of clamp mount 82. To fit on the narrow projecting surface 302, first flange 342 of narrow short "L" member 340 is narrower than first flange 42 of short "L" member 40. In addition, a clamping plate is used that is narrower than clamping plate 50. The narrow clamping plate 350 is at least as narrow as first flange 342 of narrow short "L" member 340. Preferably, the narrow clamping

plate 350 is in the form of a rectangular clamping bar that has a centered hole 351.

In this embodiment, narrow short "L" member 340 having first flange 342 and second flange 344 in a general perpendicular orientation to each other is attached to the second hole 38 which is the farthest from first flange 32 of long "L" member 30 by screw 58. First flange 342 has a threaded hole 343, and second flange 344 has a recessed hole 345. Preferably, screw 58 has a flat tapered countersunk head and dimensions of 3/8-16 x 1/2 inch long. Screw 58 extends through hole 345 of flange 344 into the lower threaded hole in second flange 36 such that the head of screw 58 is countersunk relative to face 346.

It is to be understood however, that any type of threaded cylindrical rod may be used in place of screw 58, provided the rod is of sufficient strength to hold the narrow short "L" member 340 to the long "L" member 30.

First flange 342 of narrow short "L" member 340 has a threaded hole 343 for receiving clamping screw 52 which is screwed through hole 343 and meets hole 351 of narrow clamping plate 350. Preferably, clamping screw 52 is 1/2-13 x 3 inches long, and the end of clamping screw 52 is adapted to receive a hex head wrench which is used to tighten the clamp.

Hole 343 is positioned off-center below hole 35 of first flange 32 of long "L" member 30. The bottom side of the projecting portion of narrow projecting surface 302 may be

narrower than the width of first flange 32 of long "L" member 30. First flange of narrow short "L" member 340 is narrower than first flange 32 of long "L" member 30. As a result, hole 343 is positioned closer than hole 35 to the edge of narrow projecting surface 302.

The mount 90 is secured to a narrow projecting work surface 302 by clamping the surface 302 between "a" side 33 of first flange 32 of long "L" member 30 and the top surface of narrow clamping plate 350. In a preferred embodiment, the narrow clamping plate 350 is made of steel. Buffering pads (not shown) may be utilized similarly to the utilization of the buffering pads for the clamp mount 82. However, in this embodiment, the buffering pad for the narrow clamping plate 350 would be rectangular.

FIGS. 4, 5, 10A, 10B, and 12A through 12C show the mounting system of the present invention configured as a wall mount apparatus 80. Similar to the reverse wall mount apparatus 84 configuration, long "L" member 30 is secured by at least one wall screw 54 threaded through at least one threaded hole 38 in second flange 36, and into wall 4. Preferably, second flange 36 contains two threaded holes 38, arranged vertically to each other, and the long "L" member is secured by two wall screws 54. In a preferred embodiment, the wall screws 54 are made of wood, and they are secured to a stud in wall 4. Alternatively, any type of threaded cylindrical rod may be used in place of the at

least one wall screw 54, provided the rod is of sufficient strength to hold the apparatus 80 to the wall 4.

Shaft holder 20 is secured to "a" side 33 of first flange 32 by screw 64 and nut 60. Preferably, screw 64 has dimensions of 3/8-16 x 7/8 inches long. It is also preferred that nut 60 is positioned in recess 29 in the bottom of shaft holder 20.

FIGS. 8, 9, 11A and 11B show the mounting system of the present invention configured as a table or flat mount 86. Table mount 86 comprises shaft holder 20 which is secured to a projecting surface 2, which may be a table top, preferably by passing bolt 62 through hole 28, a hole in surface 2 and hole 51 of clamping plate 50 and securing the same with nut 60. Preferably the bolt 62 has a tapered hex head, and dimensions of 3/8-16 x 2 inches long. In this preferred embodiment, the bottom hole 28 is recessed 29 for receiving the head of the bolt 62.

Preferably, the projecting surface 2 is at least one inch wide and no wider than the length of the bolt 62 with the nut 60 attached. A hole may be drilled in the surface 2 before passing the bolt 62 through the surface. Preferably, the drilled hole has a 3/8 inch diameter.

While the use of a clamping plate 50 is preferred, it may be omitted from the flat mount apparatus 86 configuration.

In other embodiments (not shown), at least one buffering pad may be placed between the bottom of the shaft holder 20 and the surface 2. In addition, the at least one buffering pad may be

alternatively or additionally placed between the top of clamping plate 50 and the surface 2. Preferably, the buffering pad is shaped similarly to clamping plate 50, having a 2 inch diameter and including a center hole. The buffering pad can protect the surface from abrasion from the apparatus 86. In addition, the buffering pad can create a more secure contact between the apparatus 86 and the surface. While any non-abrasive material could be used to make the buffering pad, a preferred material is neoprene foam. Additionally, the buffering pad may contain an adhesive for adhering to the pad to the bottom of the shaft holder 20 or to the top of clamping plate 50.

With reference to FIGS. 14 and 15, the mounting system of the present invention is configured as a panel wall mount apparatus. Typically, conventional panel wall systems have vertically aligned pairs of slots for receiving brackets and the like for securing shelves or table tops to the panel wall. The configurable mount of the present invention may be secured to the vertically aligned pairs of slots thereby permitting the arm apparatus to be secured directly to the panel wall 130. Second flange 36 of long "L" member 30 is attached to bracket 120 by at least one bolt 121 passing through at least one hole 122 on outward face 123 into at least one threaded hole 38 of second flange 36. Preferably, second flange 36 is attached to bracket 120 by two bolts 121 passing through two holes 122 on outward face 123 into two threaded holes 38 of second flange 36. Bracket

123 has a plurality of hooks 126 adapted to engage slots 128 in panel wall 130. Set screws or bolts 124 and 125 are threaded through holes 127 and 129 respectively and press against panel wall 130 to secure bracket 120 in a fixed manner. Preferably, threaded holes 127 and 129 for set screw or bolts 124 and 125 are positioned at the top and bottom of bracket 120. Preferably, plate 110 is positioned between panel wall 130 and set screws or bolts 124 and 125 to prevent damage to panel wall 130.

Optionally, plate 110 has tabs 114 for engaging a pair of slots 128 to assist in retaining plate 110 in the properly aligned position during assembly. Plate 110 may also have holes 112 to receive or permit at least one bolt 121 to pass through plate 110 in an unobstructed manner when bracket 120 is being secured to second flange 36 of long "L" member 30. Shaft holder 20 is secured to "a" side 33 of first flange 32 of long "L" member 30 as described above.

It is to be understood that any type of threaded cylindrical rod may be used in place of bolts 121 and set screws or bolts 124, 125 provided they are of sufficient strength for their intended purposes.

FIGS. 16 and 17 show the mount of the present invention configured as a slat wall mount apparatus. FIG. 17 illustrates a configuration for mounting to a slatwall 200 having only upwardly facing slats. Second flange 36 of long "L" member 30 is attached to first bracket 210 by at least one bolt passing through at

least one hole of face flange 215 into at least one threaded hole 38 of second flange 36. Preferably, second flange 36 is attached to first bracket 210 by bolts 220 and 221 passing through holes 222 and 223 respectively of face flange 215 into two threaded holes 38 of second flange 36. Lip 214 of top flange 212 is adapted to engage an upwardly facing slat 202 of slatwall 200. First bracket 210 is secured to the slat by set screws or bolts 218 threaded through holes 216 and tightened against face 206 of the slat.

A second bracket 240 has a top flange 242 with lip 244 to engage a lower upwardly facing slat 203. Second bracket 240 has a face flange 245 having a portion 247 thereof angled toward the slatwall 200 and is secured in position on lower slat 203 by set screws or bolts 248 which are threaded through portion 247 and press against the underside of lower slat 203. Second bracket 240 is secured to first bracket 210 by bolts 250 and 251 passing through holes in face flange 245 and slots 230 and 231, respectively, in face flange 215 and nuts 252 and 253. Shaft holder 20 is secured to "a" side 33 of first flange 32 of long "L" member 30 as described above.

It is to be understood that any type of threaded cylindrical rods may be used in place of bolts 220, 221, 250, 251 and set screws or bolts 218, 248 provided they are of sufficient strength for their intended purposes.

FIG. 17 illustrates a configuration of the mounting system of the present invention configured as an upwardly facing and downwardly facing slat wall mount apparatus. This apparatus is adapted for mounting to a slat wall 200 having upwardly and downwardly facing slats. First bracket 210 is secured to long "L" member 30 and the upwardly facing portion of slat 202 in the same manner as described above. In this configuration, a second bracket 260 has a lower flange 262 with lip 264 to engage the downwardly facing portion of slat 204. Second bracket 260 is secured in position on lower slat 204 by set screws or bolts 248 which are threaded through holes 269 through the bottom of lower flange 262 at an upward angle and press against the outer face 206 of lower slat 204. Second bracket 260 is secured to first bracket 210 by bolts 250 and 251 passing through holes in face flange 245 and slots 230 and 231, respectively, in face flange 215 and nuts 252 and 253. Shaft holder 20 is secured to "a" side 33 of first flange 32 of long "L" member 30 as described above.

It is to be understood that any type of threaded cylindrical rods may be used in place of bolts 250, 251 and set screws or bolts 248 provided they are of sufficient strength for their intended purpose.

This invention includes a mounting system that incorporates all or some of the components above described in FIGS. 1 through 19. In conjunction with the components described in FIGS. 1 through 19, the system of the current invention also includes all

or some of the configurations above described in relation to FIGS. 1 through 19.

In addition to the preferred embodiments previously described in detail, the shaft holder 20 may be attached to a horizontal, vertical or angled surface by attachment means (not shown) including glue, magnets, hook and loop material sold under the trademark VELCRO, tongue and groove assemblies, and the like.

The components of the mounting system may be fabricated using any suitable material such as aluminum, iron, steel other alloys as are well known in the art. Preferably, long "L" member 30, short "L" member 40, shaft holder 20 and clamping plate 50 are cast forged. Any suitable, durable plastic material may be used for "lightweight" applications. In a preferred embodiment, the nut 60 is fabricated from nylon.

Although this invention has been illustrated by reference to specific embodiments, it will be apparent to those skilled in the art that various changes and modifications may be made which clearly fall within the scope of the invention.

Claims

What is claimed is:

1. A mounting apparatus for mounting a device having an arm on a surface, said apparatus comprising:

a shaft holder, said shaft holder having a plurality of walls, said walls defining a receptacle having an enclosed bottom and an opened top portion, said receptacle shaped to receive said arm, and said arm being removably insertable into said receptacle through said opened top portion; and

an attachment means, said attachment means attaching said shaft holder to said surface.

2. The mounting apparatus as described in claim 1, wherein said plurality of walls form a circular shaft holder.

3. A mounting apparatus as described in claim 1, wherein said apparatus further comprises:

a cylindrical threaded rod and a nut;

said bottom further comprising a hole for receiving said rod, said shaft holder being attached to said surface by passing said cylindrical threaded rod through said hole and through said surface, and securing said nut on said rod.

4. A mounting apparatus as described in claim 3, wherein said rod further comprises a bolt, said bolt further comprising a tapered hex head, and said bottom hole being recessed for receiving said head of said bolt.

5. A mounting apparatus as described in claim 3, further comprising a washer, said washer positioned on said bottom of said shaft holder.

6. A mounting apparatus as described in claim 3, further comprising a clamping plate, said plate having a centrally located hole, said rod passing through said hole in said plate after passing through said surface whereby screwing said nut on said rod pushes said plate against said surface.

7. A mounting apparatus as described in claim 6, further comprising at least one buffering pad, said at least one buffering pad positioned between said bottom and said surface.

8. A mounting apparatus as described in claim 7, wherein said at least one buffering pad is positioned between said surface and said clamping plate.

9. A mounting apparatus as described in claim 1, wherein said apparatus further comprises:

a cylindrical threaded rod and a nut,
said bottom further comprising a hole for receiving said
rod, said hole being recessed for receiving said nut;
a long "L" member, said long "L" member being comprised of
a first flange and a second flange, said first flange being
generally perpendicularly attached to said second flange, said
first flange having a bolt hole, and said long "L" member being
attached to said shaft holder by passing said rod through said
bolt hole on said long "L" member and through said hole on said
bottom, and securing said nut on said rod.

10. A mounting apparatus as described in claim 9, further
comprising at least one screw, said second flange having at least
one threaded hole, said shaft holder being attached to a surface
by screwing said at least one screw through said at least one
threaded hole and into said surface.

11. A mounting apparatus as described in claim 10, wherein
said first flange has an "a" side and an "b" side, said "a" side
facing upward, and said shaft holder being attached on top of
said "a" side, and said rod being comprised of a screw.

12. A mounting apparatus as described in claim 10, wherein
said first flange has an "a" side and a "b" side, said "b" side
facing upward, and said shaft holder being attached on top of

said "b" side, said rod being comprised of a screw, said screw having a flat tapered countersunk head, said "a" side of said bolt hole being recessed for receiving said tapered countersunk head.

13. A mounting apparatus as described in claim 9, wherein said apparatus further comprises:

said first flange of said long "L" member having an "a" side and a "b" side, said "b" side facing upward, and said shaft holder being attached on top of said "b" side, said second flange of said long "L" member further having at least one threaded hole;

said rod being comprised of a screw, said screw having a flat tapered countersunk head, said "a" side of said bolt hole being recessed for receiving said tapered countersunk head;

at least one second screw, said at least one second screw further having a flat tapered countersunk head;

a short "L" member, said short "L" member being comprised of a first flange and a second flange, said first flange being generally perpendicularly attached to said second flange, said second flange having a hole, said hole further having a recess, and said first flange having a threaded screw hole, said short "L" member being attached to said long "L" member by screwing said at least one second screw through said hole on said second flange of said short "L" member and through said at least one

threaded hole on said long "L" member, said head being recessed in said recess of said hole on said second flange of said short "L" member;

a clamping plate, said plate having a top side and a bottom side; and

a clamping screw, said shaft holder being attached to a surface by clamping said surface between said "a" side of said first flange of said long "L" member and said top side of said clamping plate, said clamping screw being screwed through said bolt hole on said second flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface.

14. The mounting apparatus as described in claim 13, wherein said short "L" member is a narrow short "L" member, said first flange of said short "L" member being narrower than said first flange of said long "L" member, and said clamping plate being a narrow clamping plate, said narrow clamping plate being at least as narrow as said first flange of said short "L" member.

15. A mounting apparatus as described in claim 13, further comprising at least one buffering pad, said at least one buffering pad positioned between said "a" side of said first flange of said long "L" member and said surface.

16. A mounting apparatus as described in claim 15, wherein said at least one buffering pad is positioned between said surface and said clamping plate.

17. A mounting apparatus as described in claim 9, wherein said surface is a panel wall having vertically aligned slots, said apparatus further comprising:

said first flange of said long "L" member having an "a" side and an "b" side, said "a" side facing upward, and said shaft holder being attached on top of said "a" side, said rod being comprised of a screw, said second flange of said long "L" member further having at least one threaded hole;

a bracket, said bracket having a plurality of hooks, said hooks adapted to engage said slots, said bracket further having at least one hole, said bracket further having two threaded holes;

two set screws, each of said set screws passing through one of said two threaded holes and engaging the panel wall; and

at least one bolt, said bracket being attached to said second flange of said long "L" member by passing said at least one bolt through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member, said shaft holder being mounted to said surface by engaging said plurality of hooks in said vertically aligned slots.

18. A mounting apparatus as described in claim 17, wherein one of said two set screws is positioned at the top of said bracket and the second of said two set screws is positioned at the bottom of said bracket.

19. A mounting apparatus as described in claim 17, further comprising a plate, said plate being positioned between said panel wall and said set screws to prevent damage to said panel wall by said screws.

20. A mounting apparatus as described in claim 19, wherein said plate further comprises at least two tabs, said tabs engaging at least two of said slots, said plate further comprising at least one hole, said at least one bolt passing through said at least one hole on said plate, through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member.

21. A mounting apparatus as described in claim 9, wherein said surface is a slat wall having only upwardly facing slats, said apparatus further comprising:

said first flange of said long "L" member having an "a" side and an "b" side, said "a" side facing upward, and said shaft holder being attached on top of said "a" side, said rod being

comprised of a screw, said second flange of said long "L" member further having at least one threaded hole;

a first bracket, said first bracket having a face flange and a top flange, said face flange attached to said top flange, said top flange having a lip, said lip adapted to engage one of said slats, said face flange of said first bracket further having at least one hole, at least two threaded holes, and at least two slots;

at least one bolt, said first bracket being attached to said second flange of said long "L" member by passing said at least one bolt through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member, said shaft holder being mounted to said surface by engaging said lip in one of said upwardly facing slots;

at least two set screws, each of said at least two set screws passing through one of said two threaded holes and engaging the slat wall;

a second bracket, said second bracket having a top flange, said top flange having a lip, said lip engaging one of said upwardly facing slats, said second bracket further having a face flange, said face flange being attached to said top flange, said face flange having at least two holes, said face flange further having an angled portion, said angled portion having at least two set screw holes;

at least two bracket bolts and at least two bracket nuts, said at least two bracket bolts and at least two bracket nuts attaching said second bracket to said first bracket, by passing each of said at least two bracket bolts through one of said at least two holes in said face flange of said second bracket and through said at least two slots, and securing one of said at least two bracket nuts on each said at least two bracket bolts;

at least two bracket set screws, each of said at least two bracket set screws passing through one of said at least two set screw holes in said angled portion, and engaging the slat wall.

22. A mounting apparatus as described in claim 9, wherein said surface is a slat wall having upwardly facing slats and downwardly facing slats, said apparatus further comprising:

said first flange of said long "L" member having an "a" side and an "b" side, said "a" side facing upward, and said shaft holder being attached on top of said "a" side, said rod being comprised of a screw, said second flange of said long "L" member further having at least one threaded hole;

a first bracket, said first bracket having a face flange and a top flange, said face flange attached to said top flange, said top flange having a lip, said lip adapted to engage one of said upwardly facing slats, said face flange of said first bracket further having at least one hole, at least two threaded holes, and at least two slots;

at least one bolt, said first bracket being attached to said second flange of said long "L" member by passing said at least one bolt through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member, said shaft holder being mounted to said surface by engaging said lip in one of said upwardly facing slots;

at least two set screws, each of said at least two set screws passing through one of said two threaded holes and engaging the slat wall;

a second bracket, said second bracket having a lower flange, said lower flange having a lip, said lip engaging a downwardly facing slat, said lower flange further having at least two set screw holes, said second bracket further having a face flange, said face flange being attached to said lower flange, said face flange having at least two holes;

at least two bracket bolts and at least two bracket nuts, said at least two bracket bolts and at least two bracket nuts attaching said second bracket to said first bracket, by passing each of said at least two bracket bolts through one of said at least two holes in said face flange of said second bracket and through one of said at least two slots, and securing each of said at least two bracket nuts on each of said at least two bracket bolts; and

at least two bracket set screws, each of said at least two bracket set screws passing through one of said at least two set screw holes in an upwardly angled direction, and said at least two bracket set screws engaging the slat wall.

23. A mounting system for mounting a device having an arm on a surface, said system comprising:

(a) a set of components, said components comprised of:

(1) a shaft holder, said shaft holder having a plurality of walls, said walls defining a receptacle having an enclosed bottom and an opened top portion, said receptacle shaped to receive said arm, and said arm being removably insertable into said receptacle through said opened top portion, said bottom further comprising a hole for receiving a threaded cylindrical rod, said hole being recessed;

(2) a plurality of threaded cylindrical rods and a nut;

(3) a clamping plate, said plate having a centrally located hole;

(4) a long "L" member, said long "L" member being comprised of a first flange and a second flange, said first flange being generally perpendicularly attached to said second flange,

said first flange further having an "a" side and a "b" side, said first flange having a bolt hole, and said second flange having at least one threaded hole;

(5) a short "L" member, said short "L" member being comprised of a first flange and a second flange, said first flange being generally perpendicularly attached to said second flange, said second flange having a hole, and said first flange further having a threaded screw hole, and

(6) a clamping screw; and

(b) a series of configurations of said components, each said configuration creating an apparatus for mounting a device having an arm on a surface.

24. The mounting system as described in claim 23, wherein said apparatuses are in a group consisting essentially of a clamp mount, a wall mount, a reverse wall mount, and a flat mount.

25. The mounting system as described in claim 23, wherein said configurations are comprised of:

(a) passing one of said plurality of threaded cylindrical rods through said bottom hole, through said surface, through said clamping plate hole, and screwing said nut on said threaded cylindrical rod;

(b) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(c) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface; and

(d) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of

threaded cylindrical rods through said hole on said second flange of said short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and said top side of said clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface.

26. The mounting system of claim 23 wherein said components further comprise a narrow short "L" member, said narrow short "L" member being narrower than said first flange of said long "L" member, and further comprising a narrow clamping plate.

27. The mounting system as described in claim 26, wherein said configurations are further comprised of:

(a) passing one of said plurality of threaded cylindrical rods through said bottom hole, through said surface, through said clamping plate hole, and screwing said nut on said threaded cylindrical rod;

(b) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first

flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(c) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(d) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of threaded cylindrical rods through said hole on said second flange of said short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and

said top side of said clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface; and

(e) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of threaded cylindrical rods through said hole on said second flange of said narrow short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and said top side of said narrow clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said narrow short "L" member and meeting said bottom side of said narrow clamping plate, said clamping screw pushing said narrow clamping plate upward to engage said surface.

28. The mounting system as described in claim 23, wherein said components are further comprised of:

a bracket, said bracket having a plurality of hooks, said hooks adapted to engage slots on a panel wall having slots, said bracket further having at least one hole, said bracket further having two threaded holes;

two set screws; and

at least one bolt.

29. The mounting system as described in claim 28, wherein said configurations are further comprised of:

(a) passing one of said plurality of threaded cylindrical rods through said bottom hole, through said surface, through said clamping plate hole, and screwing said nut on said threaded cylindrical rod;

(b) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(c) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of

threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(d) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of threaded cylindrical rods through said hole on said second flange of said short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and said top side of said clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface; and

(e) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of

threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, passing each of said set screws through one of said two threaded holes on said bracket and engaging the panel wall, attaching said bracket to said second flange of said long "L" member by passing said at least one bolt through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member, and mounting said shaft holder to said surface by engaging said plurality of hooks in the vertically aligned slots.

30. The mounting system as described in claim 28, wherein said components are further comprised of:

- two set screws;
- a plate, said plate comprising at least two tabs, said plate further comprising at least one hole.

31. The mounting system as described in claim 30, wherein said configurations are further comprised of:

- (a) passing one of said plurality of threaded cylindrical rods through said bottom hole, through said surface, through said clamping plate hole, and screwing said nut on said threaded cylindrical rod;

(b) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(c) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(d) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of

threaded cylindrical rods through said hole on said second flange of said short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and said top side of said clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface; and(e) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod,

positioning one of said two set screws at the top of said bracket and positioning the second of said two set screws at the bottom of said bracket,

position said plate between said panel wall and said set screws to prevent damage to said panel wall by said set screws,

engaging said tabs on at least two of said slots, and

passing said at least one bolt through said at least one hole on said plate, through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member.

32. The mounting system as described in claim 23, wherein said components further comprise:

a first bracket, said first bracket having a face flange and a top flange, said face flange attached to said top flange, said top flange having a lip, said lip adapted to engage a slat on a slat wall surface, said face flange of said first bracket further having at least one hole, at least two threaded holes, and at least two slots;

at least one bolt;

at least two set screws;

a second bracket, said second bracket having a top flange, said top flange having a lip, said lip adapted to engage an upwardly facing slat, said second bracket further having a face flange, said face flange being attached to said top flange, said face flange having at least two holes, said face flange further having an angled portion, said angled portion having at least two set screw holes;

at least two bracket bolts and at least two bracket nuts;

at least two bracket set screws.

33. The system as described in claim 32, wherein said configurations further comprise:

(a) passing one of said plurality of threaded cylindrical rods through said bottom hole, through said surface, through said

clamping plate hole, and screwing said nut on said threaded cylindrical rod;

(b) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(c) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(d) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said

bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of threaded cylindrical rods through said hole on said second flange of said short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and said top side of said clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface; and(e) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod;

attaching said first bracket to said second flange of said long "L" member by passing said at least one bolt through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member, said shaft holder being mounted to said surface by engaging said lip in an upwardly facing slot,

passing each of said at least two set screws through one of said two threaded holes and engaging the slat wall,

passing each of said at least two bracket bolts through one of said at least two holes in said face flange of said second bracket and through said at least two slots, and securing said at least two bracket nuts on said at least two bracket bolts,

engaging said lip of said second bracket in an upwardly facing slot, and

passing each of said at least two bracket set screws through one of said at least two bracket set screw holes in said angled portion, and engaging the slot wall.

34. The mounting system as described in claim 23 wherein said components further comprise:

a first bracket, said first bracket having a face flange and a top flange, said face flange attached to said top flange, said top flange having a lip, said lip adapted to engage an upwardly facing slot on a slot wall surface, said face flange of said first bracket further having at least one hole, at least two threaded holes, and at least two slots;

at least one bolt;

at least two set screws;

a second bracket, said second bracket having a lower flange, said lower flange having a lip, said lip engaging a downwardly facing slot on a slot wall surface, said lower flange further having at least two set screw holes, said second bracket further

having a face flange, said face flange being attached to said lower flange, said face flange having at least two holes;

at least two bracket bolts and at least two bracket nuts;
and

at least two bracket set screws.

35. The system as described in claim 34, wherein said configurations further comprise:

(a) passing one of said plurality of threaded cylindrical rods through said bottom hole, through said surface, through said clamping plate hole, and screwing said nut on said threaded cylindrical rod;

(b) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(c) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first

flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod, and further screwing said at least one of said plurality of threaded cylindrical rods through said at least one threaded hole on said long "L" member and into a surface;

(d) facing said "b" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "b" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first flange of said long "L" member and through said hole on said bottom, and securing said nut on said one of said plurality of threaded cylindrical rods, screwing one of said plurality of threaded cylindrical rods through said hole on said second flange of said short "L" member and through said at least one threaded hole on said long "L" member, positioning said surface between said "a" side of said first flange of said long "L" member and said top side of said clamping plate, screwing said clamping screw through said threaded screw hole on said first flange of said short "L" member and meeting said bottom side of said clamping plate, said clamping screw pushing said clamping plate upward to engage said surface; and

(e) facing said "a" side of said first flange of said long "L" member in an upward direction, positioning said shaft holder on top of said "a" side, passing one of said plurality of threaded cylindrical rods through said bolt hole on said first

flange of said long "L" member and through said hole on said bottom, and securing said nut on said threaded cylindrical rod,

attaching said first bracket to said second flange of said long "L" member by passing said at least one bolt through said at least one hole on said bracket and through said at least one threaded hole on said second flange of said long "L" member, said shaft holder being mounted to said surface by engaging said lip in said upwardly facing slat,

passing each of said at least two set screws through one of said two threaded holes and engaging the slat wall,

engaging said lip of said second bracket in a downwardly facing slat,

attaching said second bracket to said first bracket by passing each of said at least two bracket bolts through one of said at least two holes in said face flange of said second bracket and through said at least two slots, and securing said at least two bracket nuts on said at least two bracket bolts, and

passing each of said at least two set screws through one of said at least two set screw holes in an upwardly angled direction, and said at least two set screws engaging the slat wall.

Abstract Of The Disclosure

Apparatuses and systems for mounting an adjustable arm for a peripheral device. The systems are configurable mounting systems for mounting an arm device. The systems comprise a set of components which may be configured to create a clamp mount, a wall mount, a "reverse" wall mount, or table or "flat" mount, a panel mount, and a slat mount. The components of the mounting apparatuses and systems all include a shaft holder for receiving the shaft of the arm apparatus. A variety of attachment configurations are provided to attach the shaft holder to a surface.

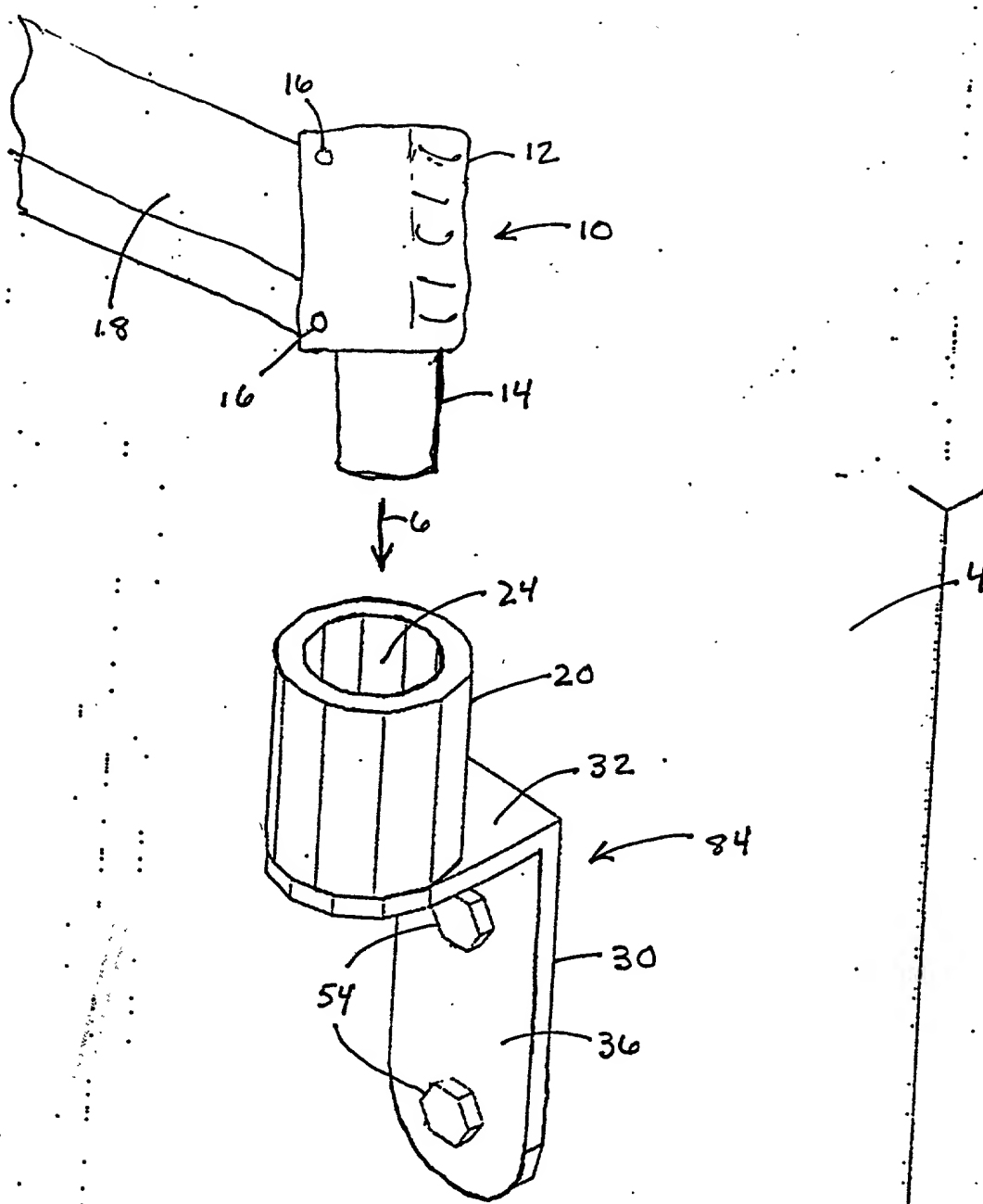


FIG. 1

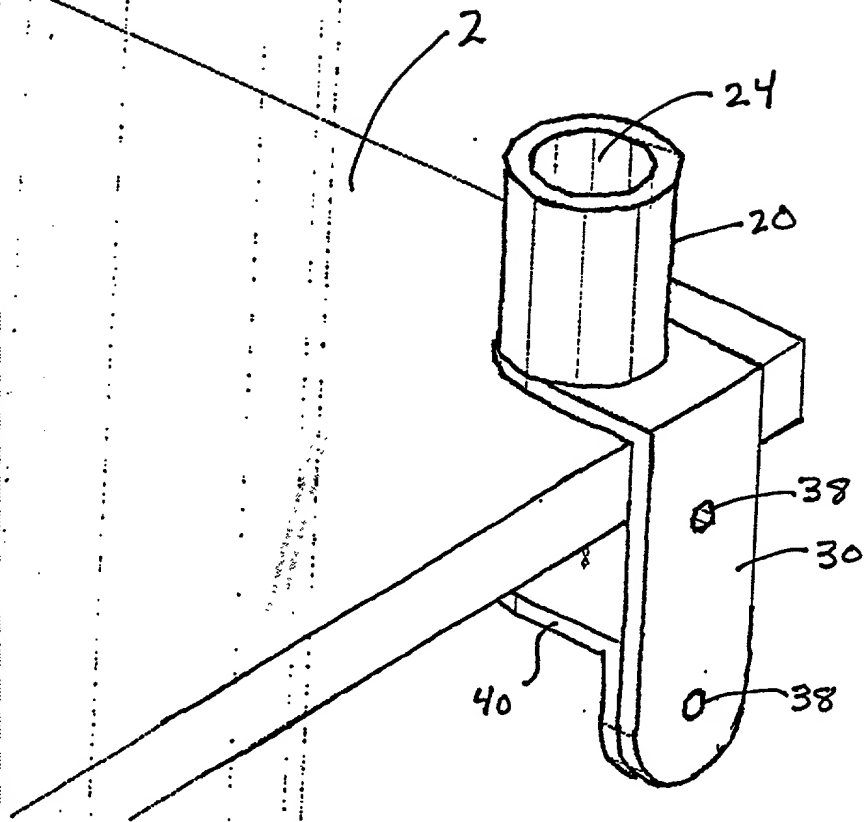


FIG. 2

SHEET 2/19

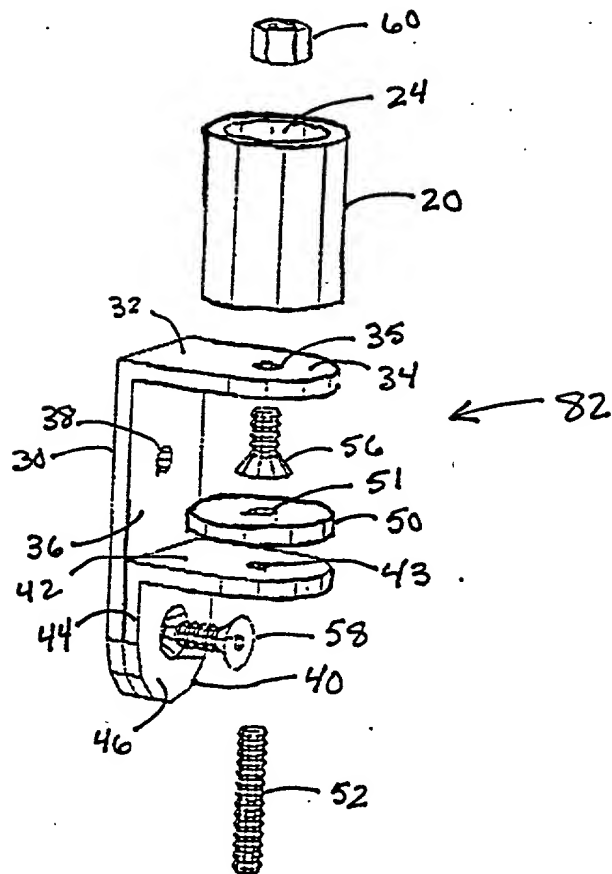
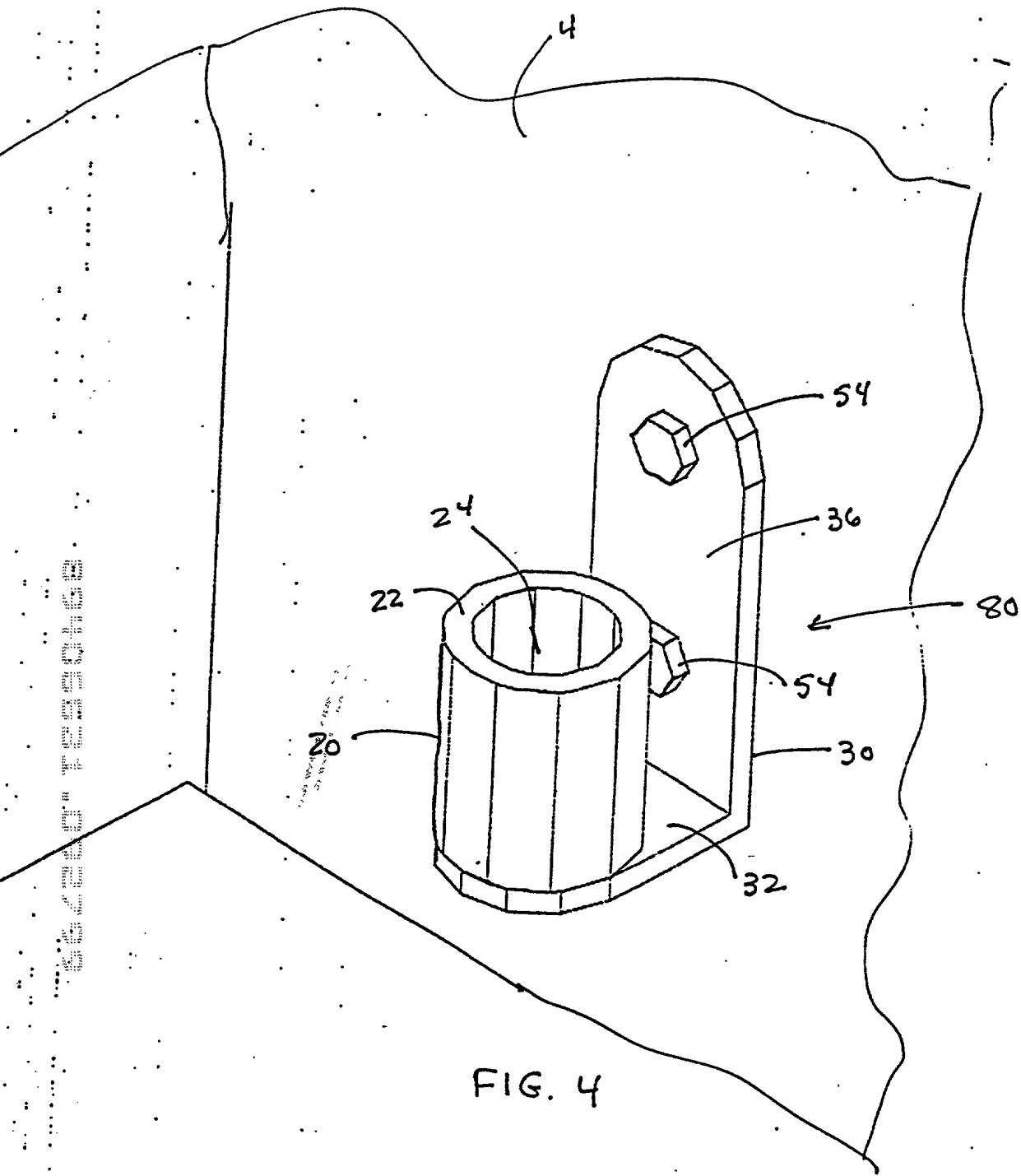


FIG. 3



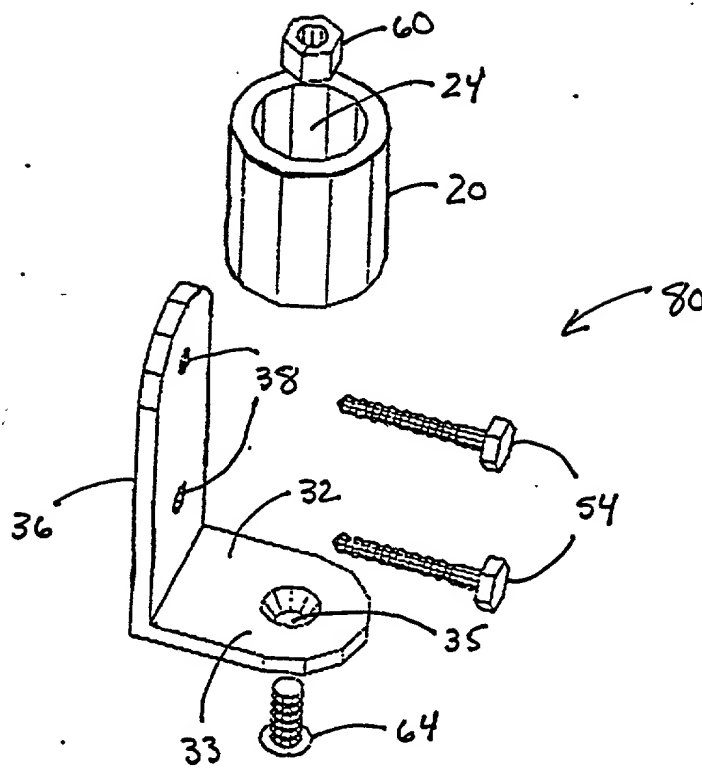


FIG. 5

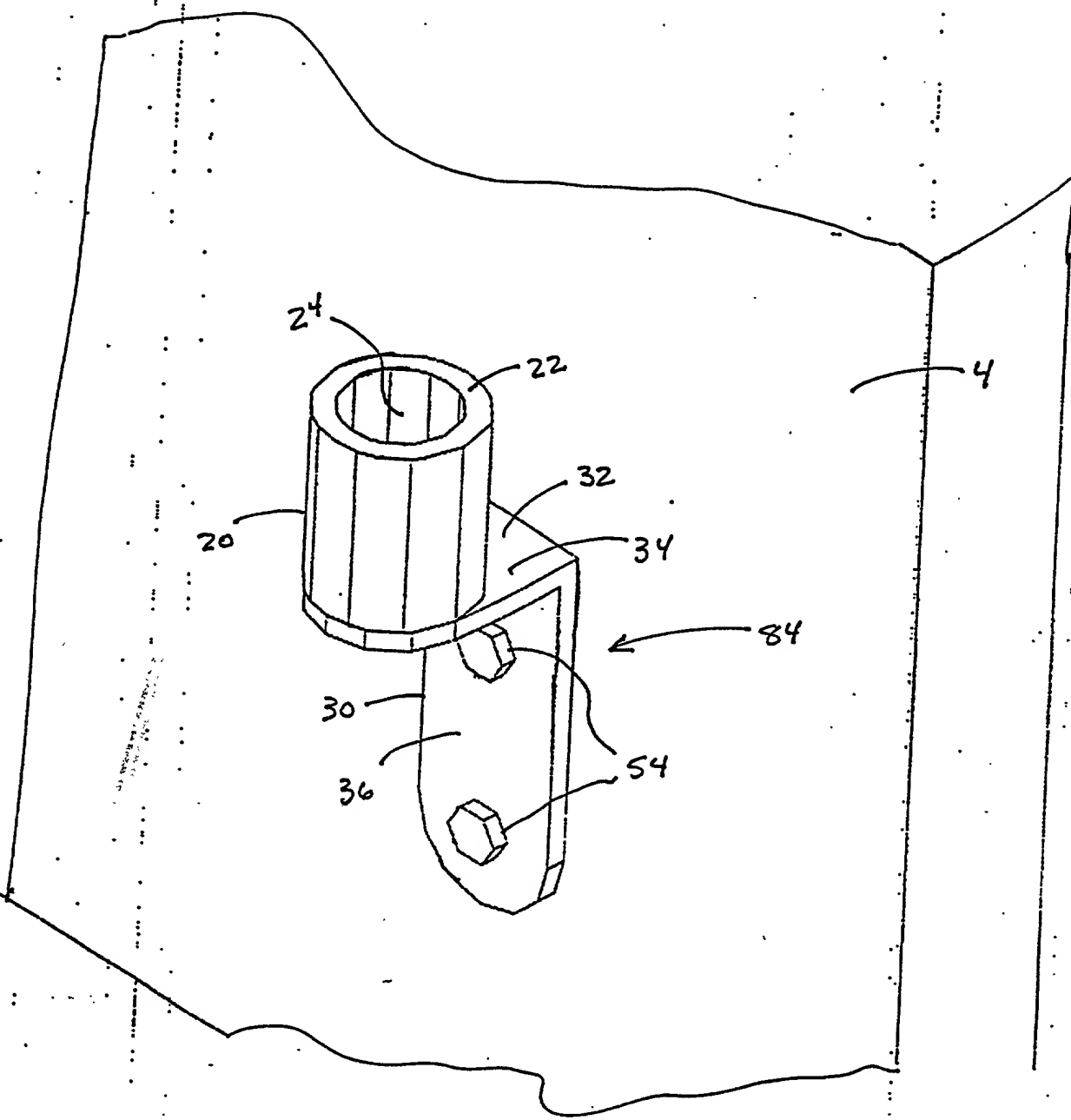


FIG. 6

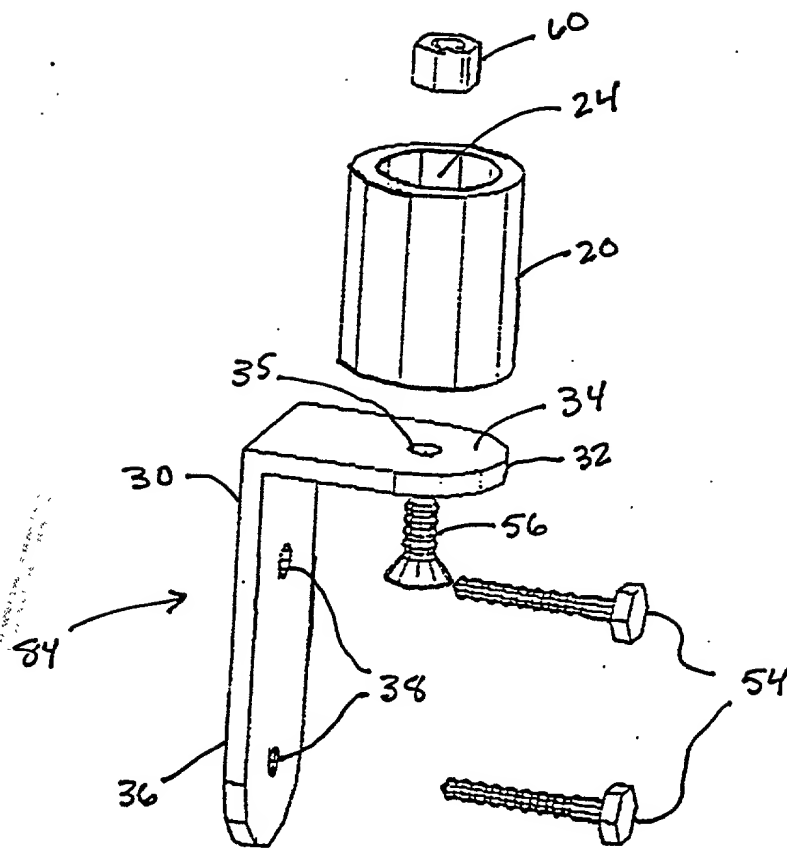


FIG. 7

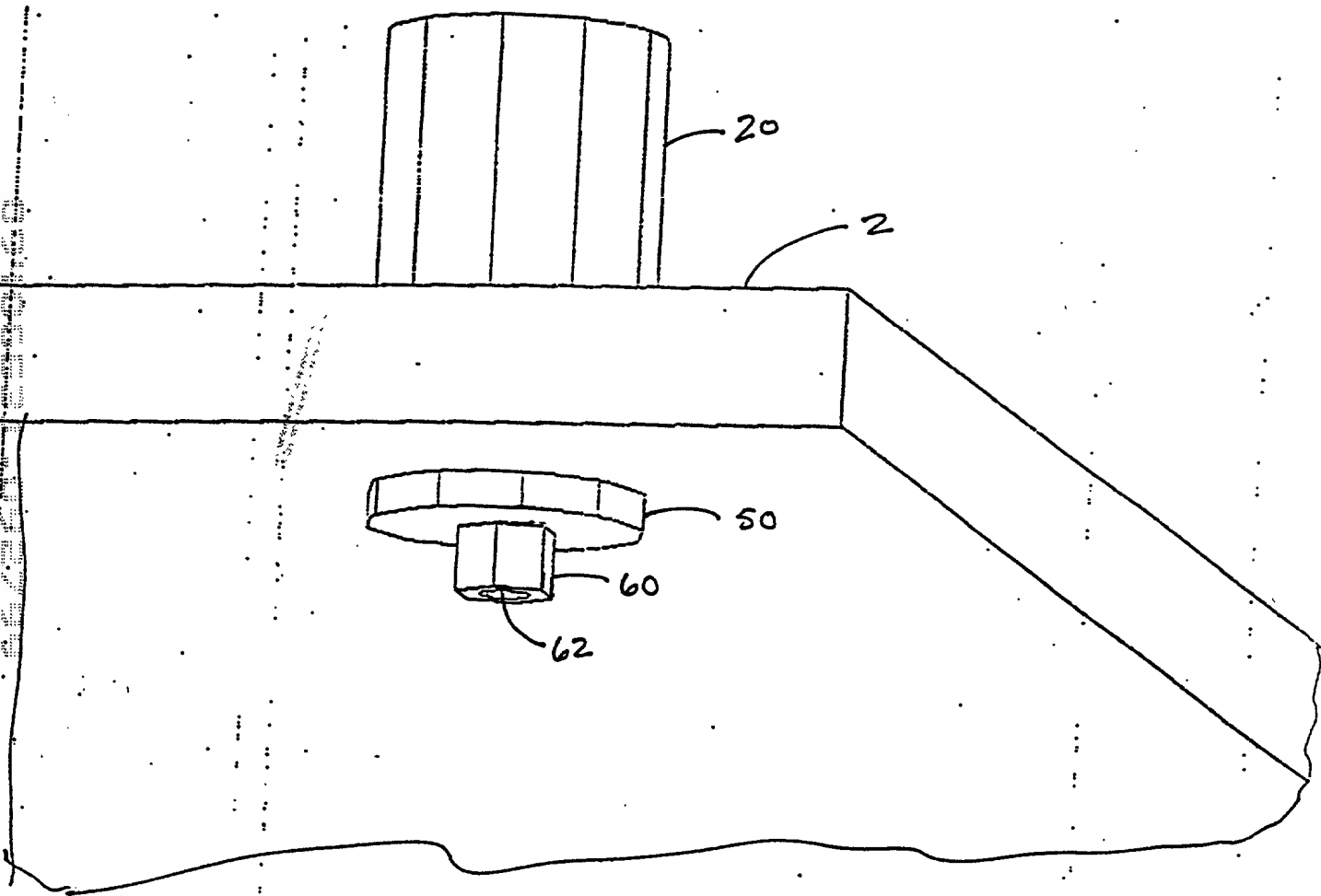


FIG. 8

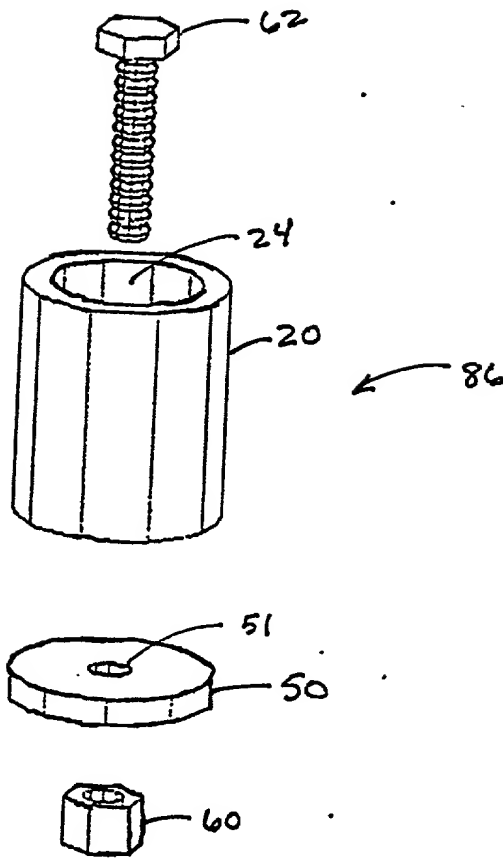
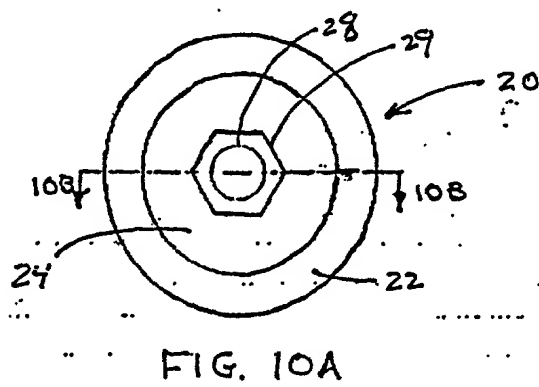
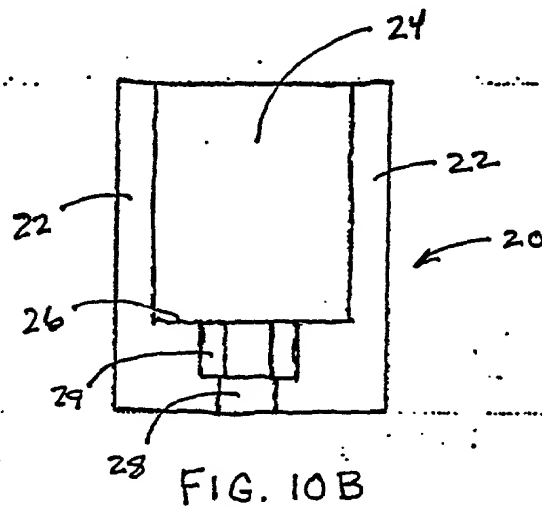


FIG. 9



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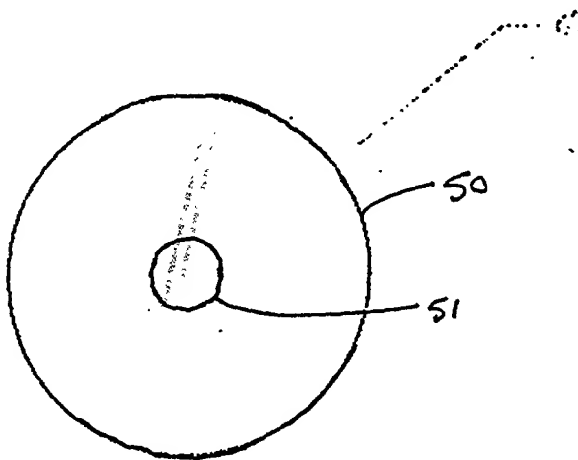


FIG. 11A

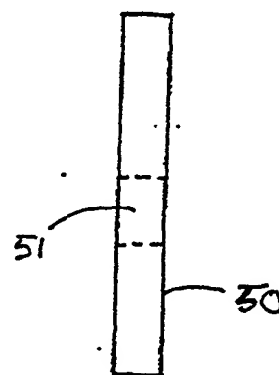


FIG. 11B

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

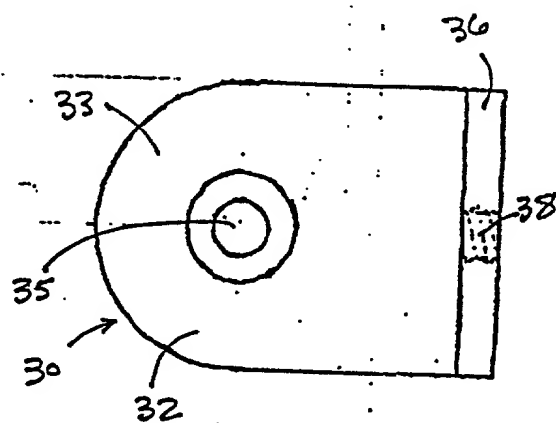


FIG. 12C

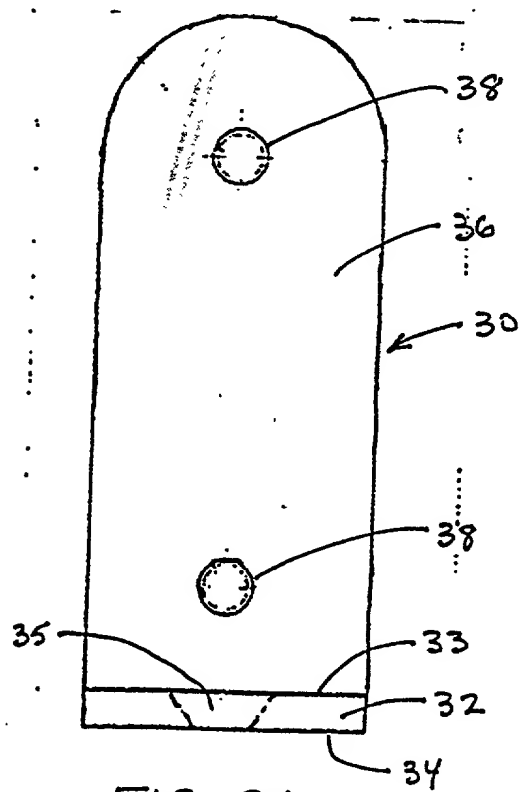


FIG. 12A

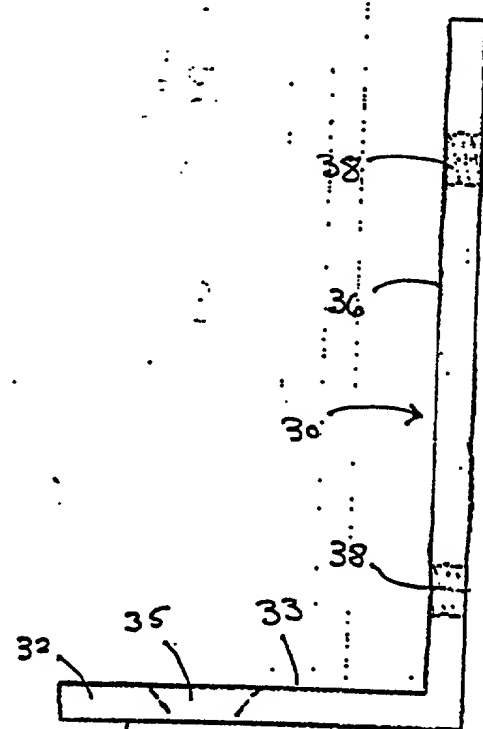


FIG. 12B

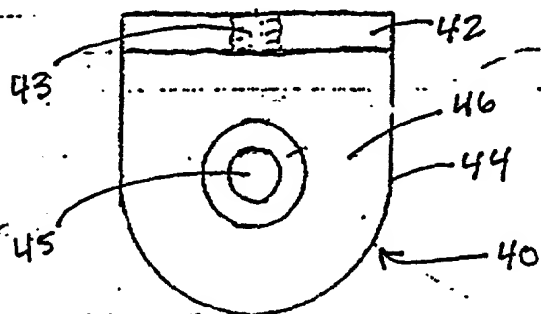


FIG. 13C

RC.952
770

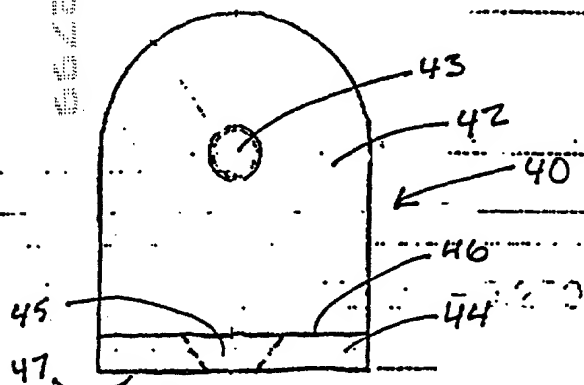


FIG. 13A

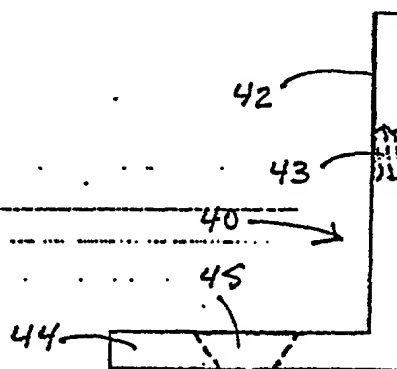
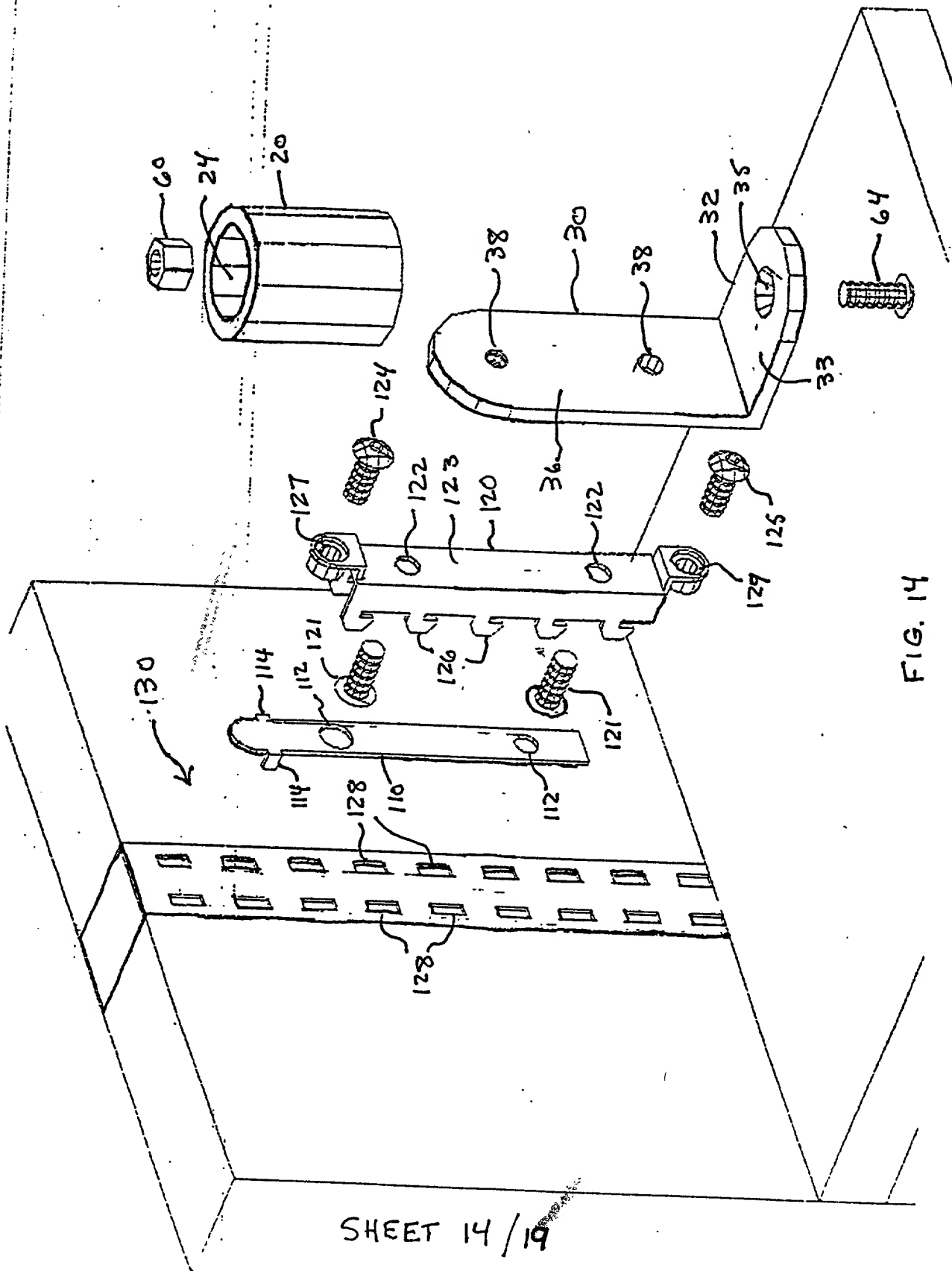


FIG. 13B



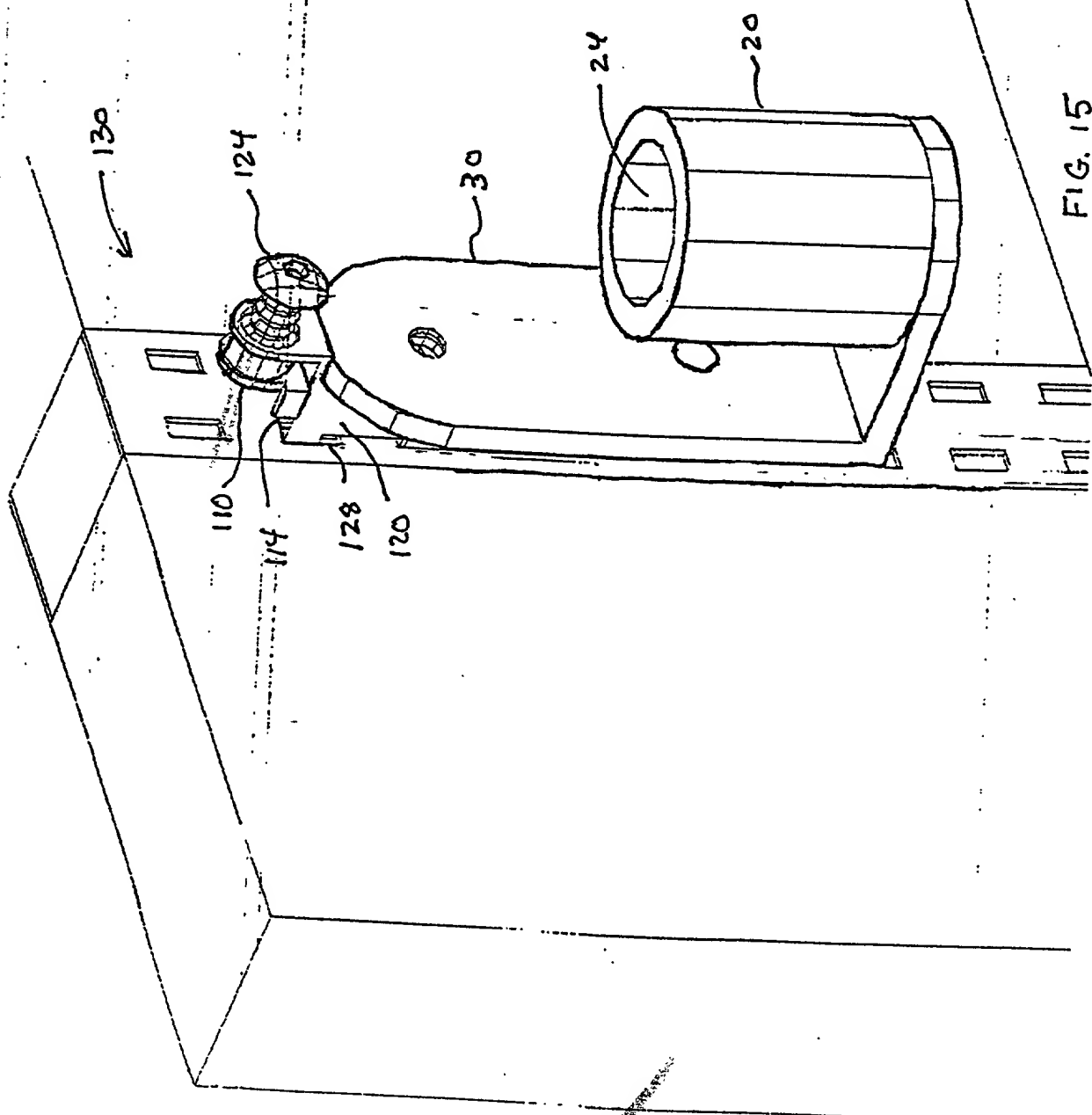


FIG. 15

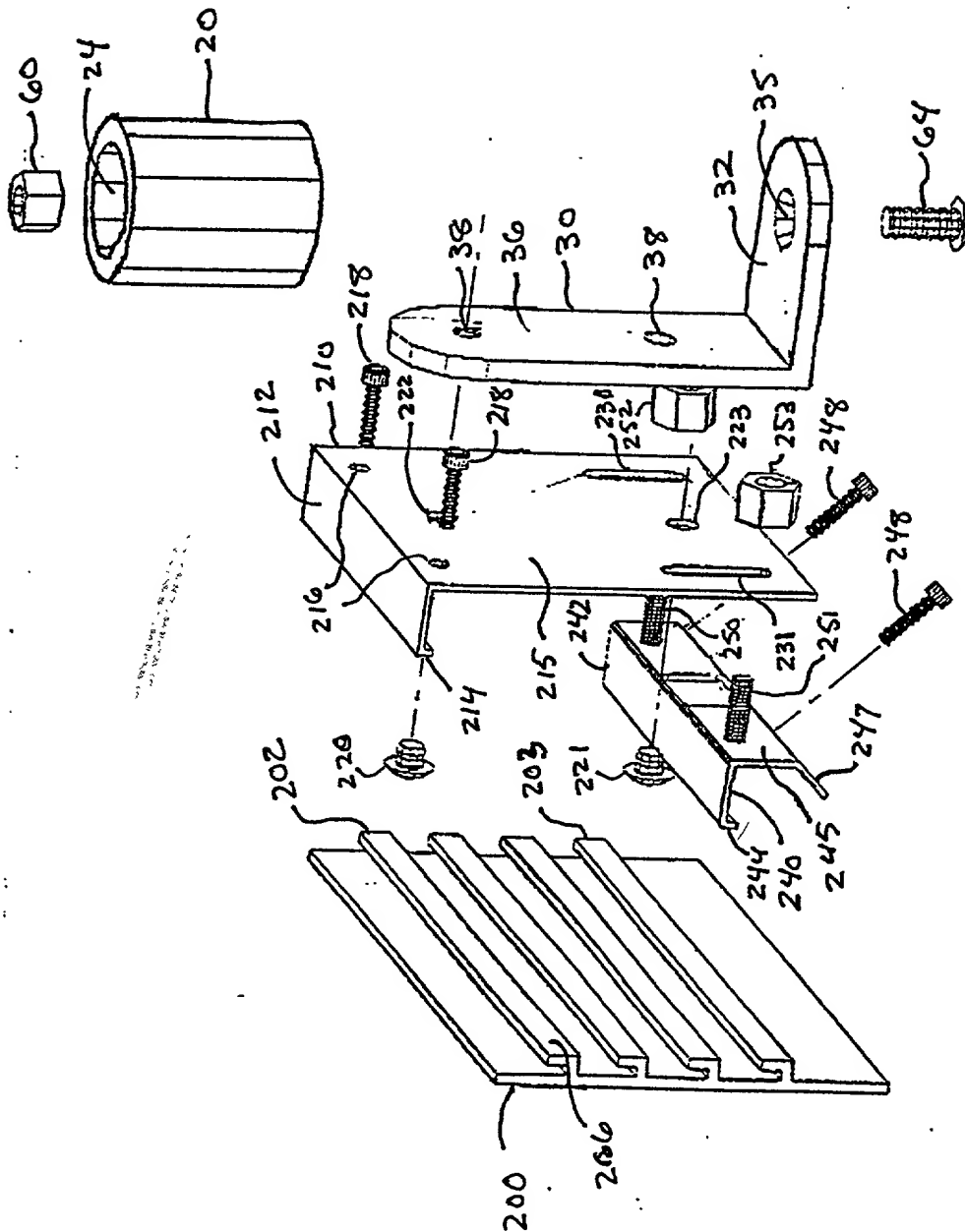


Fig. 16

652260 1530460

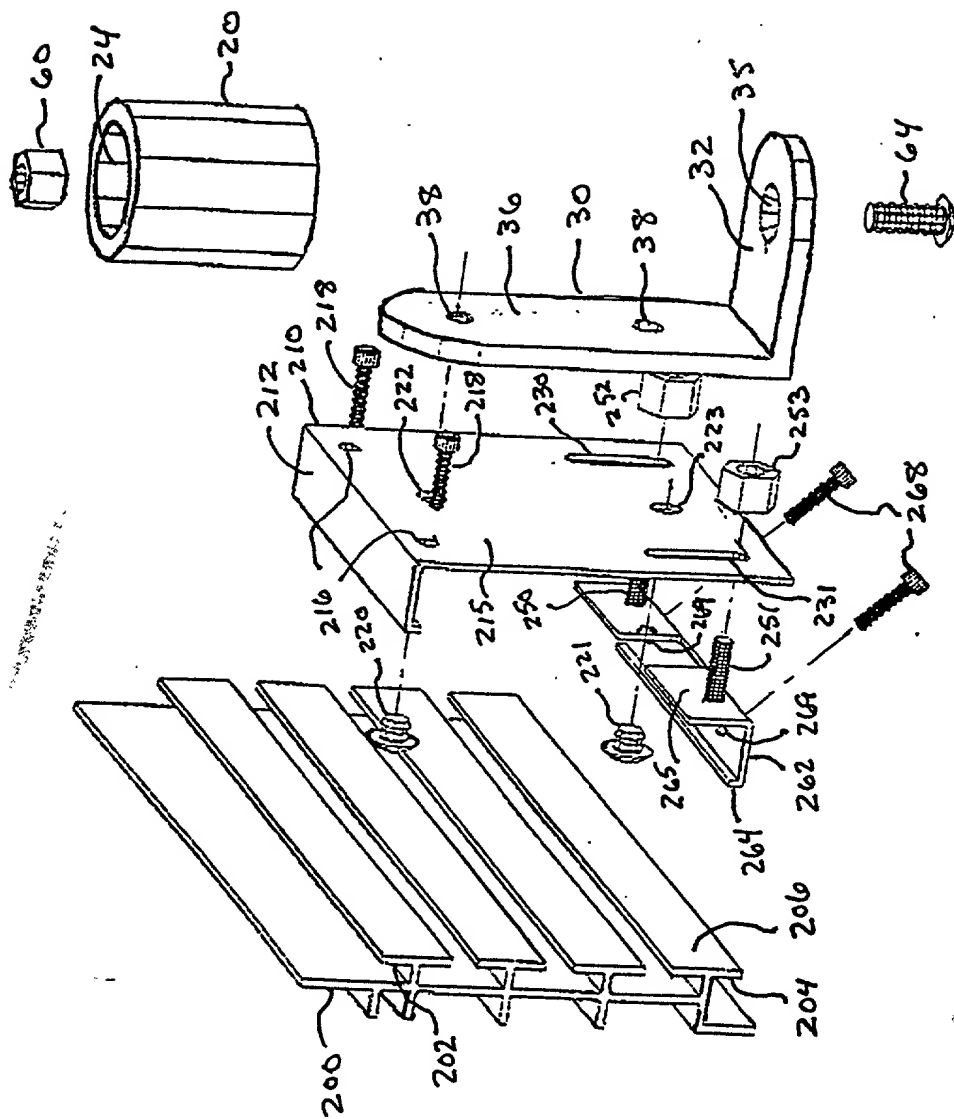


FIG. 17

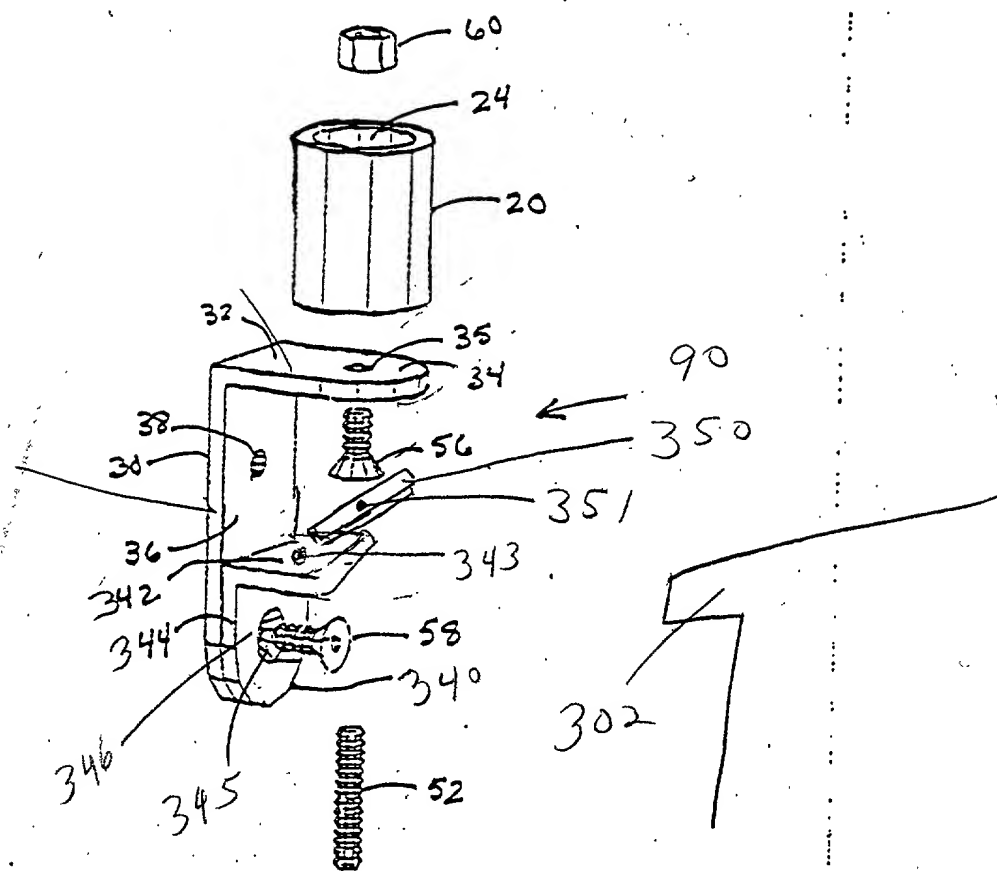
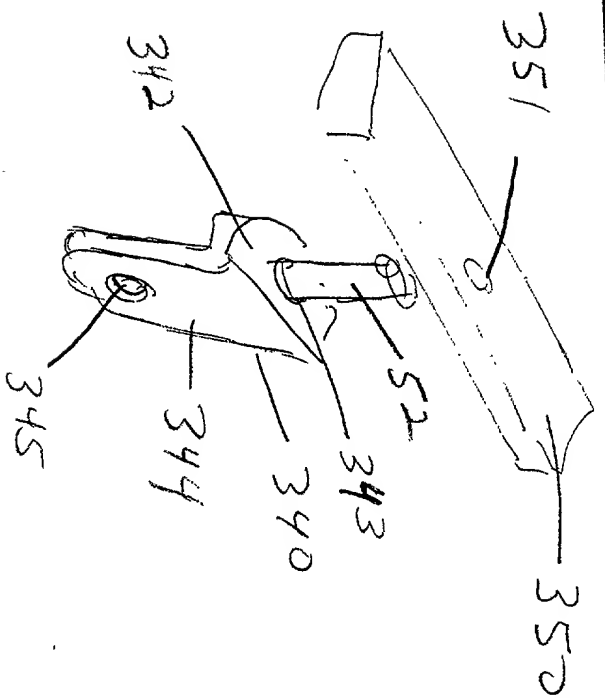


FIG. 3



19/1/9

09406531.092799

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLN NUMBER UNKNOWN	FILING DATE UNKNOWN	FIRST NAMED INVENTOR ODDSEN	ATTY. DKT. NO. 3757.3002
TITLE CONFIGURABLE MOUNT		ART UNIT UNKNOWN	EXAMINER UNKNOWN

DECLARATION AND POWER OF ATTORNEY

☒ Declaration Submitted with Initial Filing, or ☐ Declaration Submitted after Initial Filing

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CONFIGURABLE MOUNT

the specification of which

☒ is attached hereto, or
☐ was filed on (DD/MM/YYYY) as United States Application Number or PCT International Application Number and was amended on (DD/MM/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code §119 (a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (DD/MM/YYYY)	Priority Not Claimed	Copy Attached?	
			<input type="checkbox"/>	YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority sheet attached hereto.

I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (DD/MM/YYYY)
60/106,729	02/11/1998
60/108,469	14/11/1998

☐ Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s), or §365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, code of Federal Regulations §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Application Number	Parent Filing Date (DD/MM/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority sheet attached hereto.

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Name	Registration Number
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Douglas J. Ryder	43,073

☐ Additional attorney(s) and/or agent(s) are listed on a supplemental sheet attached hereto.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole or First Inventor: ODDSEN, ODD N., JR.

Signature: 

Date: Sept 24 1999

Residence: Easton, Pennsylvania

Post Office Address: 2100 Liberty Street, Easton, PA 18042

Citizenship: United States of America

Full Name of Additional Joint Inventor:

Signature:

Date:

Residence:

Post Office Address:

Citizenship:

☐ Additional inventors are being named on supplemental sheet(s) attached hereto.